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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,989	07/31/2001	Gary Gustine	100.204US01	3774
34206	7590	07/26/2004	EXAMINER	
FOGG AND ASSOCIATES, LLC			TRAN, THANH Y	
P.O. BOX 581339				
MINNEAPOLIS, MN 55458-1339			ART UNIT	PAPER NUMBER
			2827	

DATE MAILED: 07/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/918,989

Applicant(s)

GUSTINE ET AL.

Examiner

Thanh Y. Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 136-140 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-12, 139 and 140 is/are allowed.
- 6) ☒ Claim(s) 1-5 and 136-138 is/are rejected.
- 7) ☒ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 5/7/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant arguments filed on 5/7/2004 have been fully considered and are persuasive with respect to claims 7-12 and 139-140 but moot in view of new ground of rejection with respect to claims 1-6 and 136-138.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Holt (U.S. 5,914,854).

As to claim 1, Holt discloses in figures 1A-1C a case (10) for confining a first circuit card (12) to a particular location within a housing, the case (10) comprising: a pair of opposing end walls; a pair of opposing side walls coupled to the end walls; wherein the pair of end walls and the side walls form a slot (a slot is the interior of the computer housing); and an actuator (see element 200 as indicated in figure 2A) disposed within the slot, the actuator (200) engageable with the first circuit card (12) for clamping the first circuit card (12) between the actuator and one of the pair of opposing end walls of the case (see Figs. 1A-2B, col. 3, line 60 – col. 4, line 43, and col. 5, lines 10-26).

As to claim 3, Holt discloses in figures 1A-1C a case (10) for confining a first circuit card (12) to a particular location within a housing, wherein the first circuit card (12) is in slidable contact with the case.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. 5,914,854) in view of Weimer et al (U.S. 5,750,905).

As to claim 2, Holt does not teach the actuator is resilient element. Weimer et al (U.S. 5,750,905) teaches in figure 7 a case comprising an actuator (70), wherein the actuator (70) is resilient element (see col. 4, lines 45-65). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the case of Holt by including a resilient actuator as taught by Weimer et al. One of ordinary skill in the art would have been motivated because using a resilient actuator for the case would avoid/prevent the pressure applied to the printed circuit board because such excessive pressure could cause the printed circuit board to bend or crack (see col. 4, lines 45-65 in Weimer et al).

5. Claims 4-5 and 138 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. 5,914,854) in view of Hutchison et al (U.S. 6,404,637).

As to claims 4 and 5, Holt does not teach the case is thermally coupled to the housing; and wherein a heat sink is disposed between the case and the housing. Hutchison et al (U.S. 6,404,637) teaches in figures 3-5 a case (as shown in figure 5) for confining a first circuit card to a particular location within a housing (12), wherein the case (as indicated at 20) is thermally coupled to the housing (12) (see Figs. 3-5, col. 5,

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lines 53-65); and wherein a heat sink [see element 29, col. 4, lines 20-30, element 29 acts as a heat sink because it transfers heat away from the case (sleeve 20)] is disposed between the case and the housing (12). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the case of Holt by having a case thermally coupled to the housing; and wherein the heat sink is disposed between the case and the housing as taught by Hutchison et al. One of ordinary skill in the art would have been motivated because providing a heat sink between the case and the housing would release or transfer heat away from card which is located inside the case (see col. 5, lines 53-65 in Hutchison et al).

As to claim 138, Holt does not teach one of the pairs of end walls is in direct thermal contact with the first circuit card. Hutchison et al (U.S. 6,404,637) teaches in figure 3 a case (as indicated in figure 5) for confining a first circuit card to a particular location within a housing (12), wherein one of the pairs of end walls is in direct thermal contact with the first circuit card (see Fig. 3, col. 5, lines 53-65). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the case of Holt by one of the pairs of end walls is in direct thermal contact with the first circuit card as taught by Hutchison et al. One of ordinary skill in the art would have been motivated because providing a thermal contact directly between end walls of the case and the circuit card would directly release or transfer heat away from card which is located inside the case (see col. 5, lines 53-65 in Hutchison et al).

6. Claims 136-137 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holt (U.S. 5,914,854) in view of Campo et al (U.S. 2003/0074946).

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As to claims 136 and 137, Holt does not teach the actuator is a cam or a wedge. Campo et al (U.S. 2003/0074946) teaches an actuator (actuation means) comprises a cam or a wedge (see col. 7, lines 30-33). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the case of Holt by having an actuator comprising a wedge or a cam as taught by Campo et al. One of ordinary skill in the art would have been motivated because a wedge actuator would be used for engaging with the inclined surface; and a cam would be used for engaging with the ramp surface.

Allowable Subject Matter

7. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Claims 7-12 and 139-140 are allowable.

9. The following is a statement of reasons for the indication of allowable subject matter: claim 7 recites, inter alia, "a case for confining a pair of circuit cards to different locations within a housing, comprising: a partition disposed between the first and second end walls that divides the case into a first slot bounded by a portion of each of the side walls, the partition, and the first end wall and a second slot bounded by another portion of each of the side walls, the partition, and the second end wall, the first and second slots each containing one of the circuit cards; and an actuator is engageable with the circuit card in the first slot for clamping the circuit card in the first slot, the partition, and the

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circuit card in the second slot between the actuator and the second end wall"; in the combination with other claimed features.

10. The art of record does not disclose the above limitations, nor would it be obvious to modify the art of record so as to include the above limitations.

Cantrell (U.S. 5,642,264) discloses a chassis comprising a card guide assembly for receiving a side edge of the installed circuit card in the slot. Cantrell does not disclose a case or a chassis comprising an actuator engaged with the circuit card in the slot for clamping the circuit card in the slot, and a partition disposed between the first and second end walls, that divides the case into a first and second slots, each of the first and second slots containing one of the circuit cards.

Hutchison et al (U.S. 6,404,637) discloses a case (sleeve 20) comprising a tang portion 31 securely retains the circuit card within the slot 26 of the case (sleeve 20). Hutchison et al does not disclose the case (sleeve 20) having a partition disposed between the first and second end walls, that divides the case into a first and second slots, each of the first and second slots containing one of the circuit cards.

Holt (U.S. 5,914,854) discloses a case in figures 1A-1C, comprising an actuator (see element 200 as indicated in figures 2A-2B) disposed within the slot (the chassis bay) and engaged with the circuit card 12 for clamping the circuit card between the actuator and one of the pair of opposing end walls of the case. However, Holt does not disclose a partition disposed between the first and second end walls, that divides the case into a first and second slots, each of the first and second slots containing one of the circuit cards.

11. The above references do not disclose the above-mentioned limitations in

paragraph-9.

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12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Contact Information


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh Y. Tran whose telephone number is (571) 272-2110. The examiner can normally be reached on Monday through Thursday and on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo, can be reached on (571) 272-1957. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3431.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

TYT

7/21/2004


DAVID ZARNEKE
PRIMARY EXAMINER
7/21/04